

**R E S P O N S I V E**  
**I M A G E S**

U N D E R C O N T R O L



# C R I S T I N A C H U M I L L A S

D E S I G N E R & D R U P A L F R O N T E N D

 @chumillas

 ckrina



# RESPONSIVE IMAGES

④ THE BASICS

④ RESPONSIVE IMAGES IN DRUPAL

④ ART DIRECTION

A V E R A G E  
**PAGE WEIGHT**

2016 2,48Mb +10%

A horizontal black bar representing the average page weight for 2016. The bar is positioned below the year '2016' and extends to the right. The value '2,48Mb' is printed at the end of the bar, and '+10%' is printed to the right of the bar.

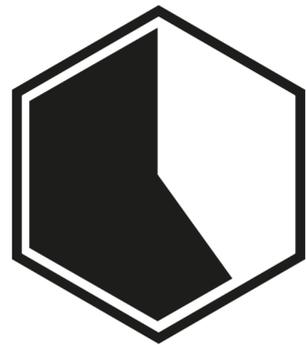
2015 2,26Mb +16%

A horizontal black bar representing the average page weight for 2015. The bar is positioned below the year '2015' and extends to the right. The value '2,26Mb' is printed at the end of the bar, and '+16%' is printed to the right of the bar.

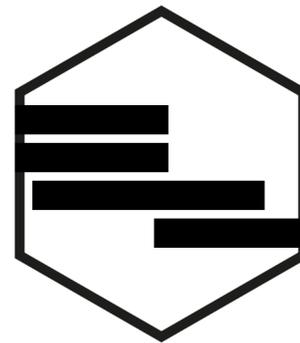
2014 1,95Mb +15%

A horizontal black bar representing the average page weight for 2014. The bar is positioned below the year '2014' and extends to the right. The value '1,95Mb' is printed at the end of the bar, and '+15%' is printed to the right of the bar.

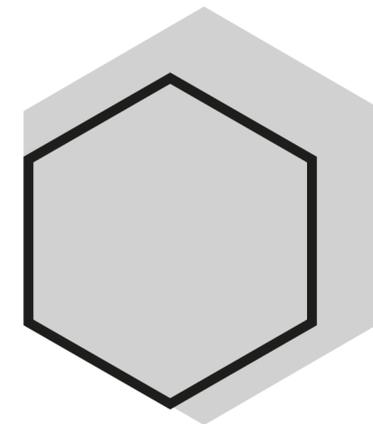
# FACTS



**61%**  
web traffic



**ASYNCHRONOUS**  
request



**TOO BIG**  
for the device

A grayscale landscape photograph of a winding road through mountains. The road curves through a valley, surrounded by rolling hills and mountains. The sky is clear and light. The overall tone is minimalist and serene.

DELIVER THE  
**HIGHEST QUALITY**  
**IMAGE SUPPORTED**  
AND NOTHING MORE.



**T H E B A S I C S**

# SCALED IMAGE



Variables known by:	AUTHOR when she's writing the code?	BROWSER when it's loading the page?
viewport dimensions	<b>X</b>	<b>YES</b>
image size relative to the viewport	<b>YES</b>	YES via <code>sizes</code> !
screen density	<b>X</b>	<b>YES</b>
source files' dimensions	<b>YES</b>	YES via <code>srcset</code> !

SOURCE <https://ericportis.com/posts/2014/srcset-sizes>

# SCALED IMAGE

```

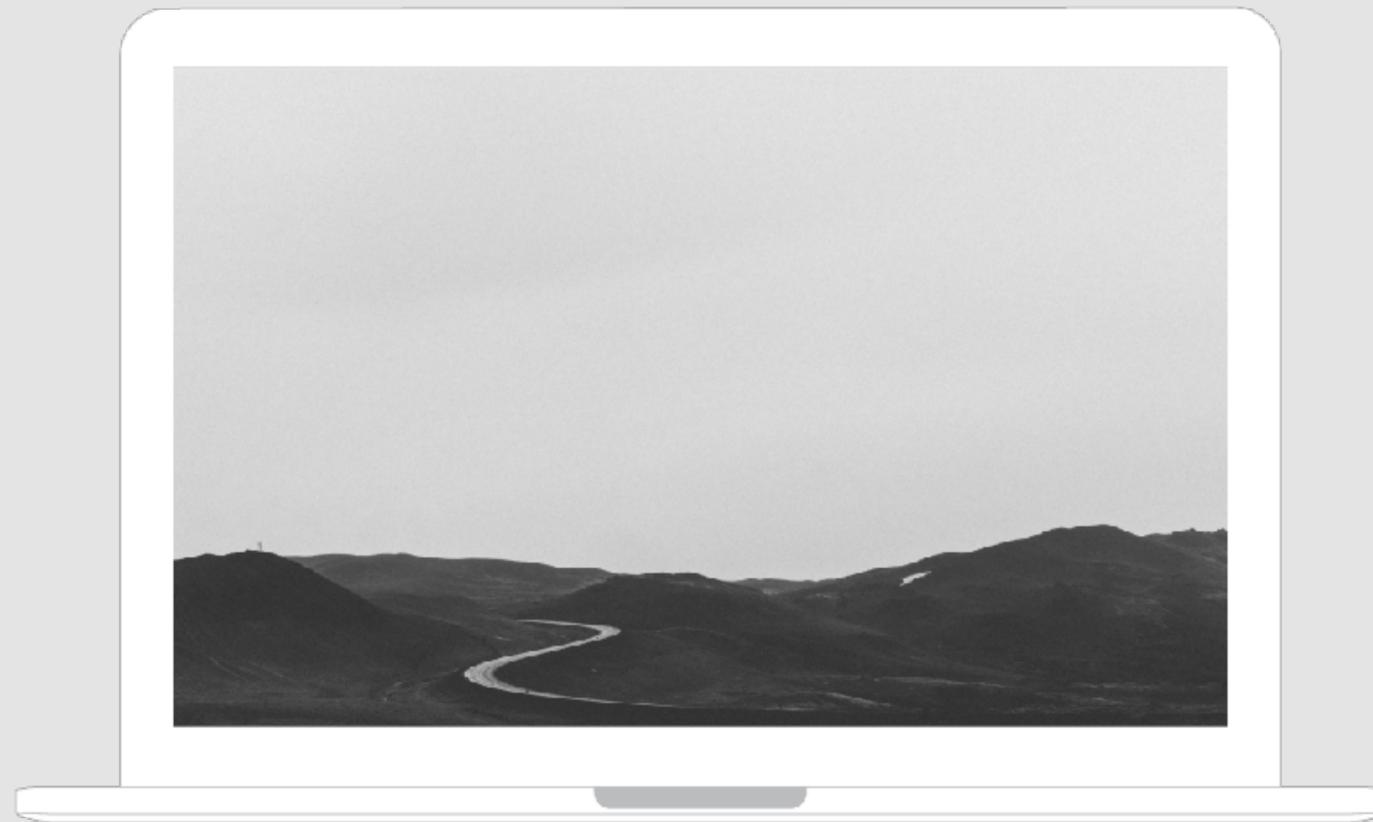
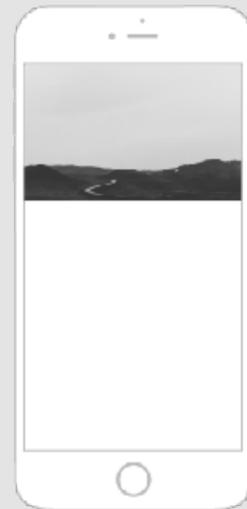
```

# **W** → **WIDTH IN PIXELS**

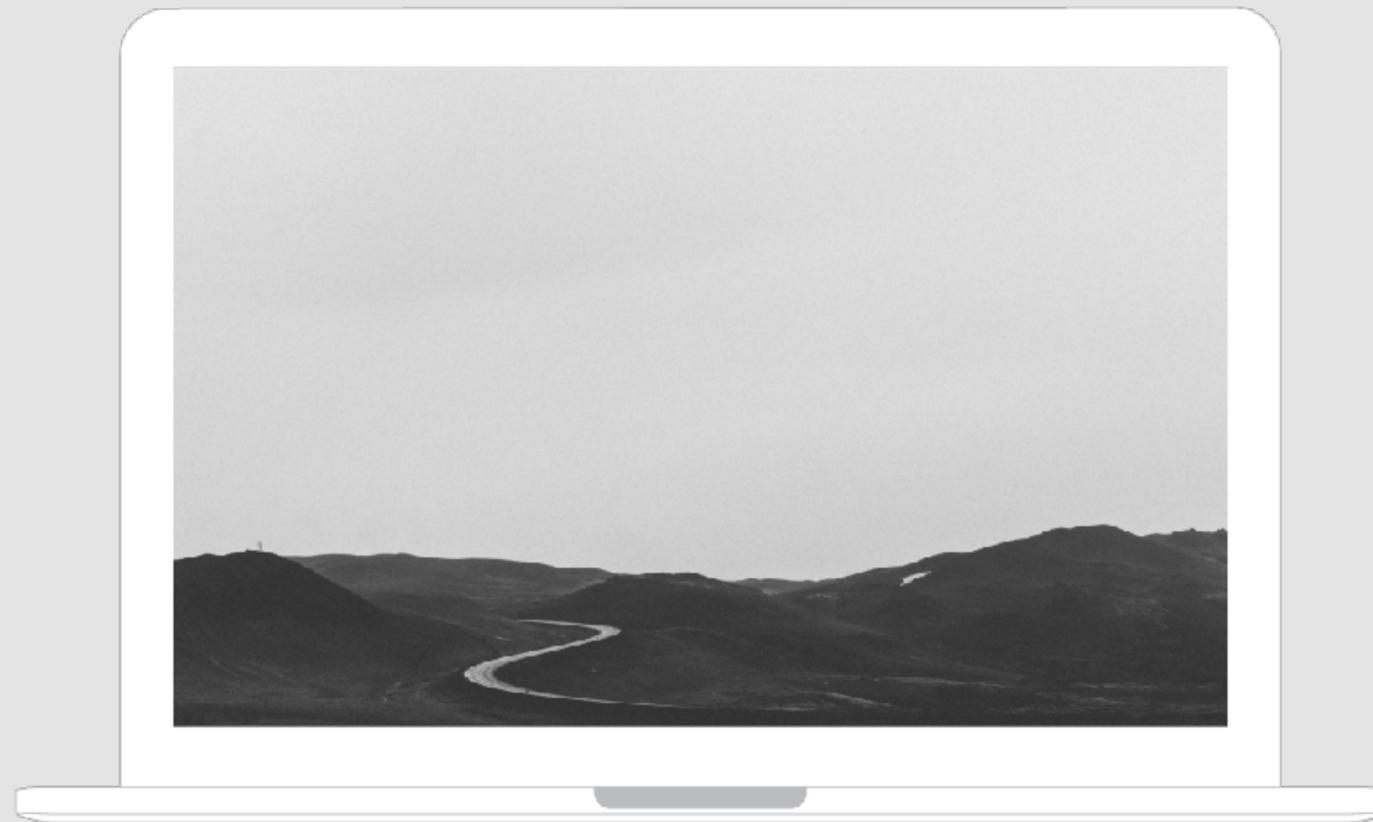
```

```

# SCALED IMAGES



# A R T D I R E C T I O N



<picture>

```
<picture>
```

```
  <source srcset=" image-small.jpg 1x,  
                 image-small2x.jpg 2x"
```

```
        media="(min-width: 0px) and  
              (max-width: 29.99em)">
```

```
  <source srcset="image-big.jpg 1x,  
                 image-big2x.jpg 2x"
```

```
        media="(min-width: 30em)">
```

```
        sizes="(min-width: 30em) 33vw">
```

```
  
```

```
</picture>
```

B R O W S E R S U P P O R T

# P I C T U R E

## Picture element - LS

Global

74.27%

A responsive images method to control which image resource a user agent presents to a user, based on resolution, media query and/or support for a particular image format

Current aligned Usage relative Date relative Show all

IE	Edge *	Firefox	Chrome	Safari	Opera	iOS Safari *	Opera Mini *	Android Browser *	Chrome for Android
			49					4.3	
			51					4.4	
			54			9.3		4.4.4	
11	14	50	55	10	42	10.2	all	53	55
	15	51	56	TP	43				
		52	57		44				
		53	58						

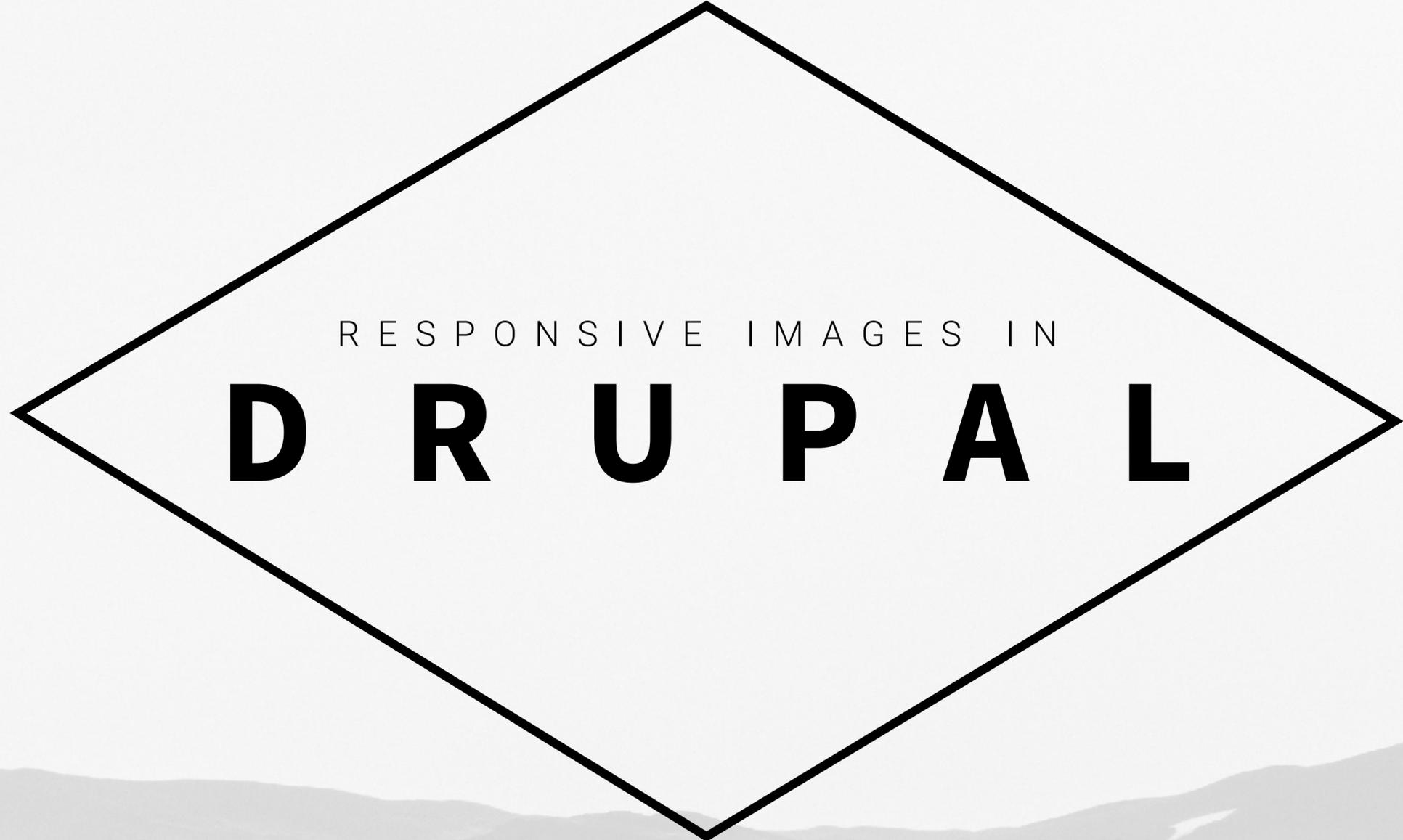
Same for `secret` and `sizes`

B R O W S E R   S U P P O R T

# P I C T U R E F I L L

<http://scottjehl.github.io/picturefill/>

A R E S P O N S I V E   I M A G E   P O L Y F I L L



RESPONSIVE IMAGES IN

**DRUPAL**



# **D R U P A L 7**

## **RESP\_IMG > PICTURE BREAKPOINT**

COMMITTERS: Jelle\_S, attiks,...

---

## **ADAPTIVE IMAGES AIS (ADAPTIVE IMAGE STYLES)**

---

## **CLIENT-SIDE ADAPTIVE IMAGE**

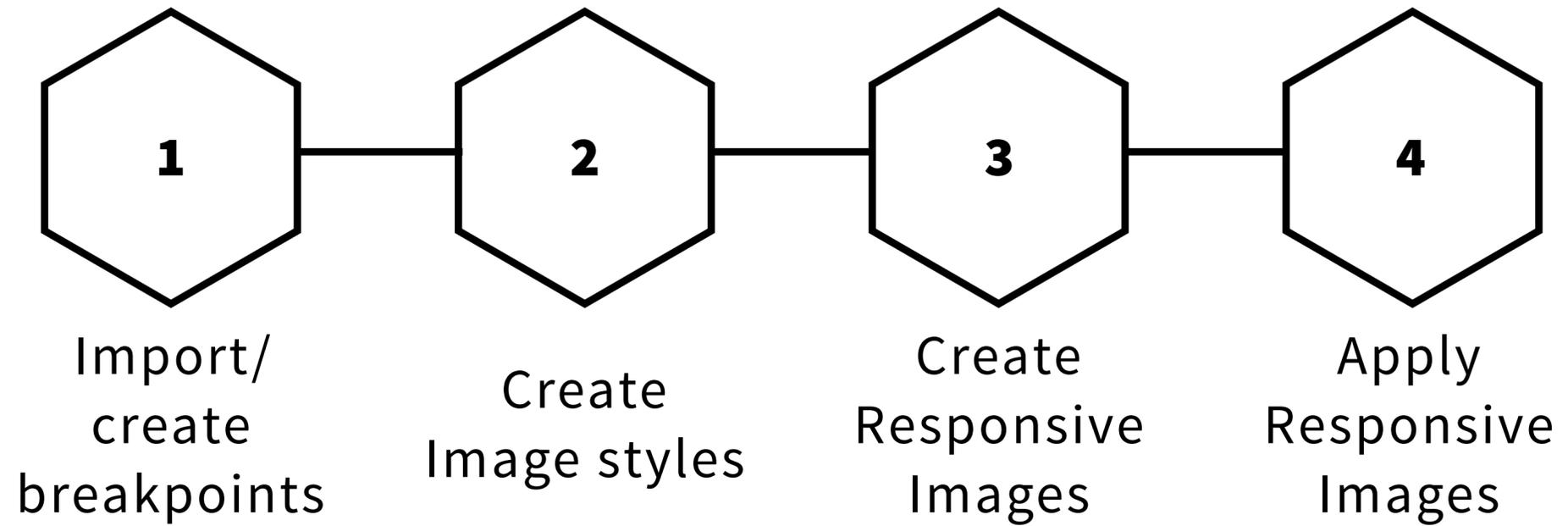
# **M O D U L E S**

**RESPONSIVE IMAGES** (Picture)

**BREAKPOINT**

Image,File,Field

# P R O C E S S



# B R E A <sup>W H E R E</sup> K P O I N T S



## T H E M E S

- ▼ themes
  - ▼ bartik
    - > color
    - > config
    - > css
    - > images
    - > templates
    - bartik.breakpoints.yml**
    - bartik.info.yml
    - bartik.libraries.yml
    - bartik.theme
    - logo.svg
    - screenshot.png

## M O D U L E S

- ▼ toolbar
  - > css
  - > js
  - > src
  - > templates
  - > tests
  - toolbar.api.php
  - toolbar.breakpoints.yml**
  - toolbar.info.yml
  - toolbar.libraries.yml
  - toolbar.module
  - toolbar.permissions.yml
  - toolbar.routing.yml
  - toolbar.services.yml

# BREAKPOINTS

1

```
@media all and (min-width: 851px)
{ /*CSS*/ }
```

```
bartik.mobile:~
· label: mobile~
· mediaQuery: ''~
· weight: 0~
· multipliers:~
· | - 1x~
bartik.narrow:~
· label: narrow~
· mediaQuery: 'all and (min-width: 560px) and (max-width: 850px)'<~
· weight: 1~
· multipliers:~
· | - 1x~
bartik.wide:~
· label: wide~
· mediaQuery: 'all and (min-width: 851px)'<~
· weight: 2~
· multipliers:~
· | - 1x~
```

# IMAGE <sup>P L A N</sup> STYLES



(min-width: **480px**)

(min-width: **830px**)

# IMAGE <sup>P L A N</sup> STYLES



**830px**

-40px margins

-20px gutter

---

770px/2 images

**385px**

# IMAGE <sup>P L A N</sup> STYLES

240px  
+25%

300px  
+25%

385px  
+25%

480px  
+25%



240px  
300px  
385px  
480px

~~240px~~  
~~300px~~  
~~385px~~

~~385px~~  
~~480px~~

# I M A G E <sup>P L A N</sup> S T Y L E S



## N A M I N G

### COMPONENT

### SIZE

teaser\_s (240x200)

240x200

teaser\_s

teaser\_s (300x250)

300x250

teaser\_m

teaser\_s (385x 310)

385x310

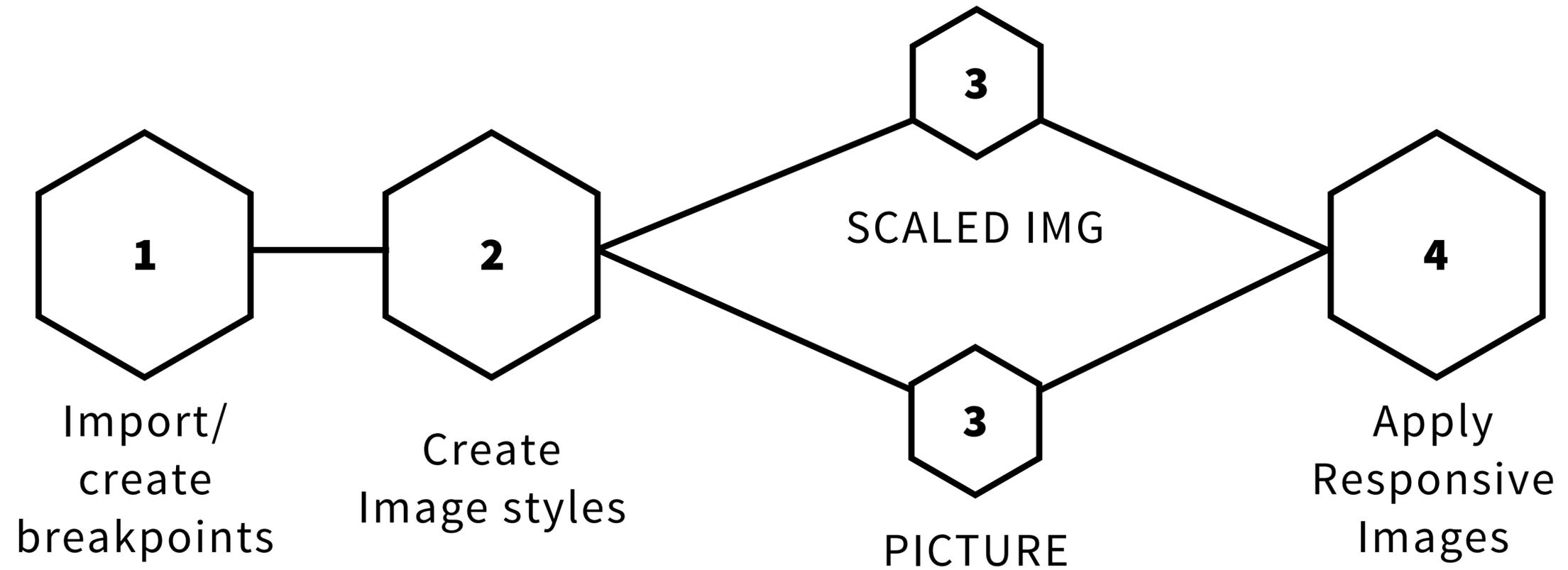
teaser\_l

teaser\_s (480x390)

480x390

teaser\_xl

# RESPONSIVE <sup>CREATE</sup> IMAGES



# SCALED IMAGE

```

```

# Add responsive image style

[Home](#) » [Administration](#) » [Configuration](#) » [Media](#) » [Responsive image styles](#)

**Label \***

Example: 'Hero image' or 'Author image'.

**Breakpoint group \***

Select a breakpoint group from the installed themes and modules.

**Fallback image style \***

Select the smallest image style you expect to appear in this space. The fallback image style should only appear on the site if an error occurs.

### test 4

Submitted by admin on Sun, 02/12/2017 - 19:57



Integer posuere erat a ante venenatis dapibus posuere velit aliquet. Donec id elit non mi porta gravida at eget metus. Duis mollis, est non commodo luctus, nisi erat porttitor ligula, eget lacinia odio sem nec elit. Nulla vitae elit libero, a pharetra augue.

---

### test 3

Submitted by admin on Sun, 02/12/2017 - 19:57



Integer posuere erat a ante venenatis dapibus posuere velit aliquet. Donec id elit non mi porta gravida at eget metus. Duis mollis, est non commodo luctus, nisi erat porttitor ligula, eget lacinia odio sem nec elit. Nulla vitae elit libero, a pharetra augue.

---

### test 2

Submitted by admin on Sun, 02/12/2017 - 19:57



Integer posuere erat a ante venenatis dapibus posuere velit aliquet. Donec id elit non mi porta gravida at eget metus. Duis mollis, est non commodo luctus, nisi erat porttitor ligula, eget lacinia odio sem nec elit. Nulla vitae elit libero, a pharetra augue.

---

### test 1

Submitted by admin on Sun, 02/12/2017 - 19:57



# ART DIRECTION

```
<picture>  
  <source srcset="image-big.jpg 1x,  
                image-big2x.jpg 2x"  
        media="(min-width: 30em)">  
  <source srcset="image-big.jpg 180w"  
        media="(min-width: 30em) 33vw">  
    
</picture>
```

## Edit responsive image style Teaser ☆

Edit Devel

Home » Administration » Configuration » Media » Responsive image styles

### Label \*

Teaser Machine name: teaser

Example: 'Hero image' or 'Author image'.

### Breakpoint group \*

Responsive Image ▾

Select a breakpoint group from the installed themes and modules. Below you can select which breakpoints to use from this group. You can also select which image style or styles to use for each breakpoint you use. Warning: if you change the breakpoint group you lose all your image style selections for each breakpoint.

▼ 1X VIEWPORT SIZING []

**Type**

- Select multiple image styles and use the sizes attribute.
- Select a single image style.
- Do not use this breakpoint.

See the [Responsive Image help page](#) for information on the sizes attribute.

**Sizes \***

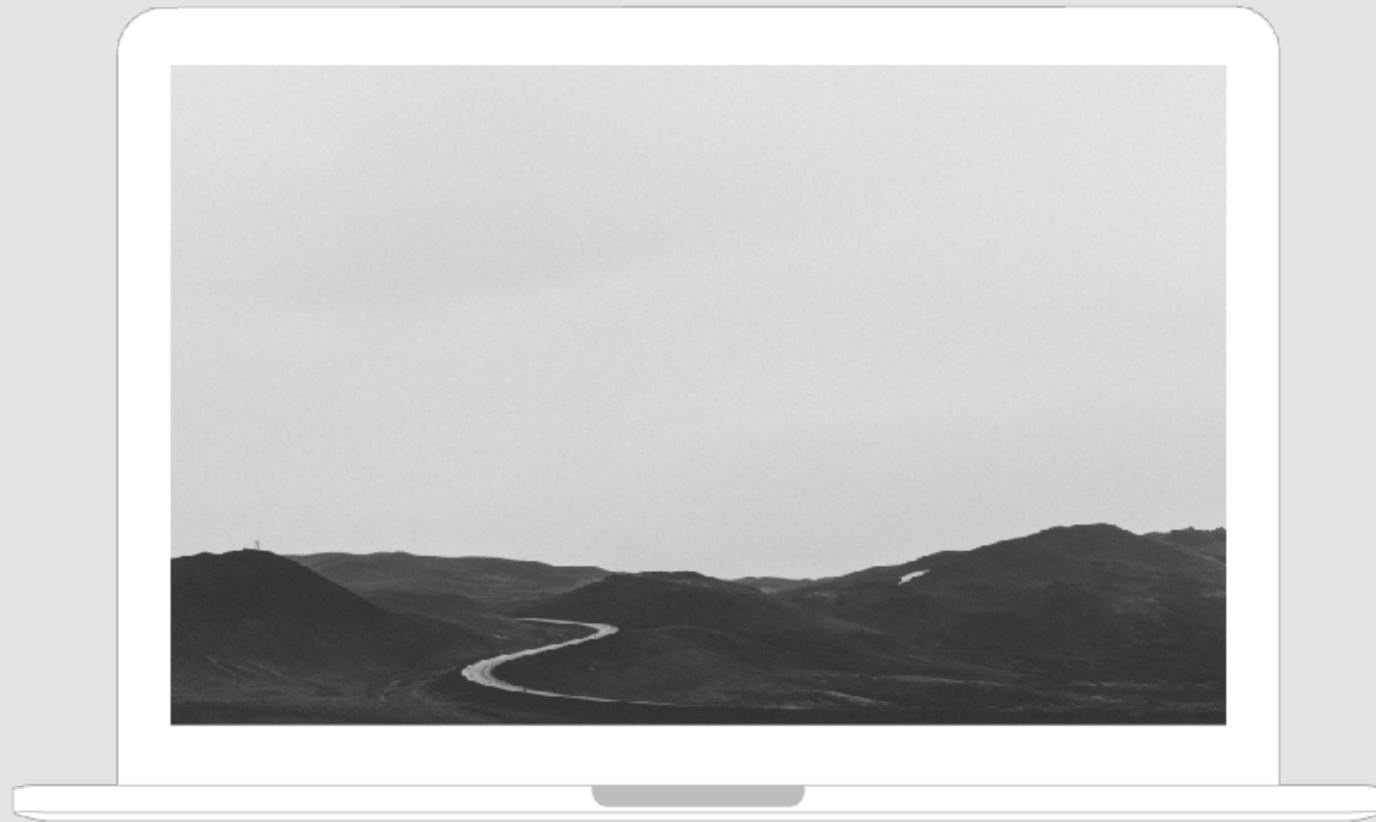
(min-width: 960px) 30vw, (min-width: 480px) 45vw, 100vw

Enter the value for the sizes attribute, for example: *(min-width:700px) 700px, 100vw.*

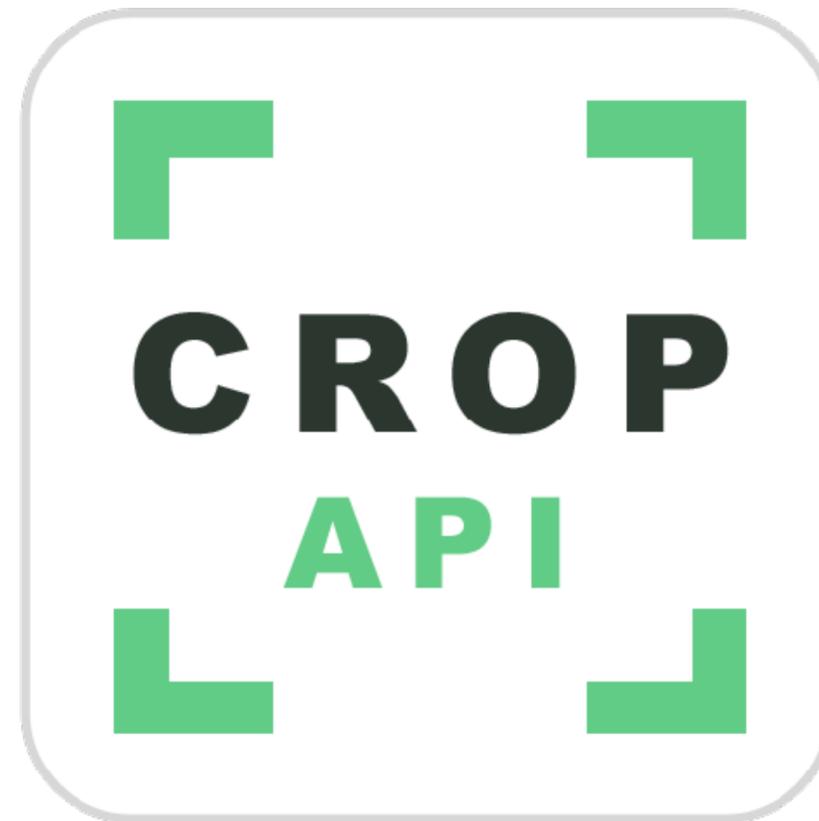
**Image styles**

- Large (480×480)
- Max 1300x1300
- Max 2600x2600
- Max 325x325



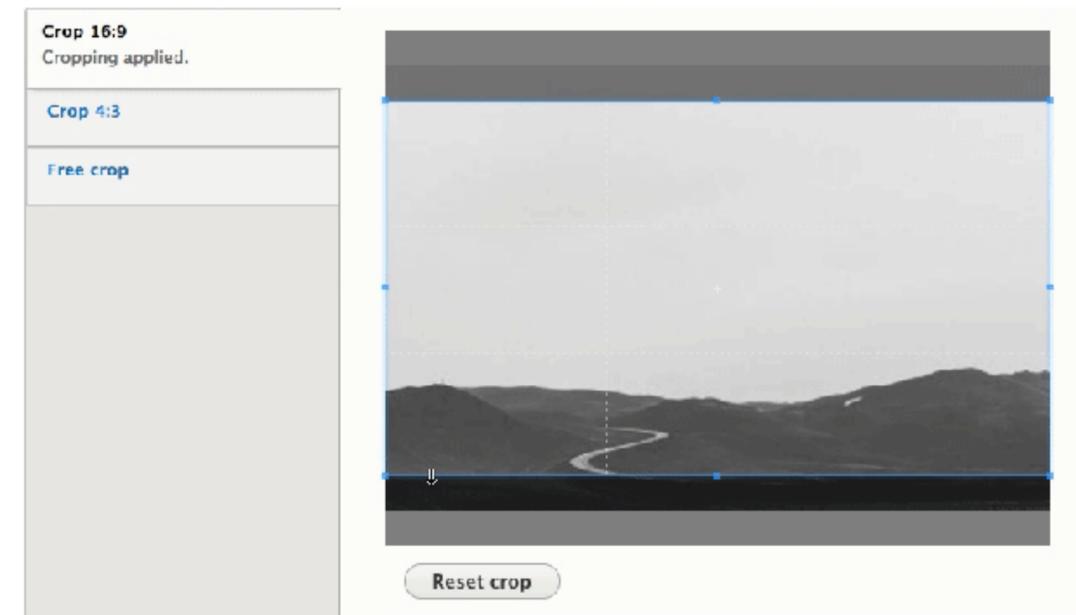


R E S P O N S I V E I M A G E S  
**A R T D I R E C T I O N**



<https://www.drupal.org/project/crop>

# I M A G E <sup>F U L L</sup> W I D G E T <sup>C O N T R O L</sup> C R O P



[https://www.drupal.org/project/image\\_widget\\_crop](https://www.drupal.org/project/image_widget_crop)

# Structure

[Home](#) » [Administration](#)

- [Block layout](#)  
Configure what block content appears in your site's sidebars and other regions.
- [Comment types](#)  
Manage form and displays settings of comments.
- [Contact forms](#)  
Create and manage contact forms.
- [Content types](#)  
Create and manage fields, forms, and display settings for your content.
- [Crop types](#)  
Manage crop types.
- [Display modes](#)  
Configure what displays are available for your content and forms.
- [Menus](#)  
Manage menus and menu links.
- [Taxonomy](#)  
Manage tagging, categorization, and classification of your content.

## Crop types

[Home](#) » [Administration](#) » [Structure](#)

✓ The crop type 2:3 has been added.

[+ Add crop type](#)

NAME	DESCRIPTION	ASPECT RATIO	USED IN	OPERATIONS
2:3		2:3		<a href="#">Edit</a> 



# Edit style *test crop* ☆

Home » Administration » Configuration » Media » Image styles

✓ Style *test crop* was created.

### Preview

original (view actual size)



test crop (view actual size)



### Image style name \*

test crop

Machine name: testcrop [Edit]

Show row weights

## EFFECT OPERATIONS

+ Select a new effect Add

Update style Delete

## Edit responsive image style Crop example responsive ☆

[Home](#) » [Administration](#) » [Configuration](#) » [Media](#) » [Responsive image styles](#)

### Label \*

Machine name: crop\_example\_responsive

Example: 'Hero image' or 'Author image'.

### Breakpoint group \*

Select a breakpoint group from the installed themes and modules. Below you can select which breakpoints to use from this group. You can also select which image style or styles to use for each breakpoint you use. Warning: if you change the breakpoint group you lose all your image style selections for each breakpoint.

#### ▼ 1X WIDE [ALL AND (MIN-WIDTH: 60EM)]

##### Type

Select multiple image styles and use the sizes attribute.

Select a single image style.

Do not use this breakpoint.

See the [Responsive Image help page](#) for information on the sizes attribute.

##### Image style

Select an image style for this breakpoint.

#### ▶ 1X NARROW [ALL AND (MIN-WIDTH: 30EM) AND (MAX-WIDTH: 59.9EM)]

#### ▶ 1X MOBILE []

### Fallback image style \*

Select the smallest image style you expect to appear in this space. The fallback image style should only appear on the site if an error occurs.

[Delete](#)

## Content types

[Home](#) » [Administration](#) » [Structure](#)

[+ Add content type](#)

NAME	DESCRIPTION	OPERATIONS
Article	Use <i>articles</i> for time-sensitive content like news, press releases or blog posts.	<a href="#">Manage fields</a> 
Basic page	Use <i>basic pages</i> for your static content, such as an 'About us' page.	<a href="#">Manage fields</a> 
Crop File Entity Example		<a href="#">Manage fields</a> 
Crop Media Example	Implementation of ImageWidgetCrop with Node type bundle with media_entity_image reference.	<a href="#">Manage fields</a> 
Crop Responsive Example	Implementation of ImageWidgetCrop with Node type with Responsive_image integration.	<a href="#">Manage fields</a> 
Crop Simple Example	Implementation of ImageWidgetCrop with Node type bundle without media_entity.	<a href="#">Manage fields</a> 

# Create Article

[Home](#) » [Node](#) » [Add content](#)

## Title <sup>\*</sup>

## Summary

Leave blank to use trimmed value of full text as the summary.

## Body

Text format

[About text formats](#) 

### Restricted HTML

- Allowed HTML tags: `<a href hreflang>` `<em>` `<strong>` `<cite>` `<blockquote cite>` `<code>` `<ul type>` `<ol start type>` `<li>` `<dl>` `<dt>` `<dd>` `<h2 id>` `<h3 id>` `<h4 id>` `<h5 id>` `<h6 id>`
- Lines and paragraphs break automatically.
- Web page addresses and email addresses turn into links automatically.

## Tags

Enter a comma-separated list. For example: Amsterdam, Mexico City, "Cleveland, Ohio"

## Image

One file only.

2 MB limit.

Allowed types: png gif jpg jpeg.

*Last saved: Not saved yet*

Author: admin

Create new revision

Revision log message

Briefly describe the changes you have made.

▶ MENU SETTINGS

▶ COMMENT SETTINGS <sup>\*</sup>

▶ URL PATH SETTINGS

▶ AUTHORIZING INFORMATION

▶ PROMOTION OPTIONS

G I V E S

**F U L L C O N T R O L**

R E Q U I R E S

**L O N G**

**I M P L E M E N T A T I O N**

# F O C A L P O I N T

A U T O M A T E D

Image



Preview



[https://www.drupal.org/project/focal\\_point](https://www.drupal.org/project/focal_point)

## Image styles ☆

Home » Administration » Configuration » Media

Image styles commonly provide thumbnail sizes by scaling and cropping images, but can also add various effects before an image is displayed. When an image is displayed with a style, a new file is created and the original image is left unchanged.

+ Add image style

STYLE NAME	OPERATIONS
Large (480×480)	Edit ▼
Max 325×325	Edit ▼
Max 650×650	Edit ▼
Max 1300×1300	Edit ▼
Max 2600×2600	Edit ▼
Medium (220×220)	Edit ▼
Teaser L (350×150)	Edit ▼
Teaser M (300×300)	Edit ▼
Thumbnail (100×100)	Edit ▼

G I V E S

**B A S I C**

**A R T D I R E C T I O N**

R E Q U I R E S

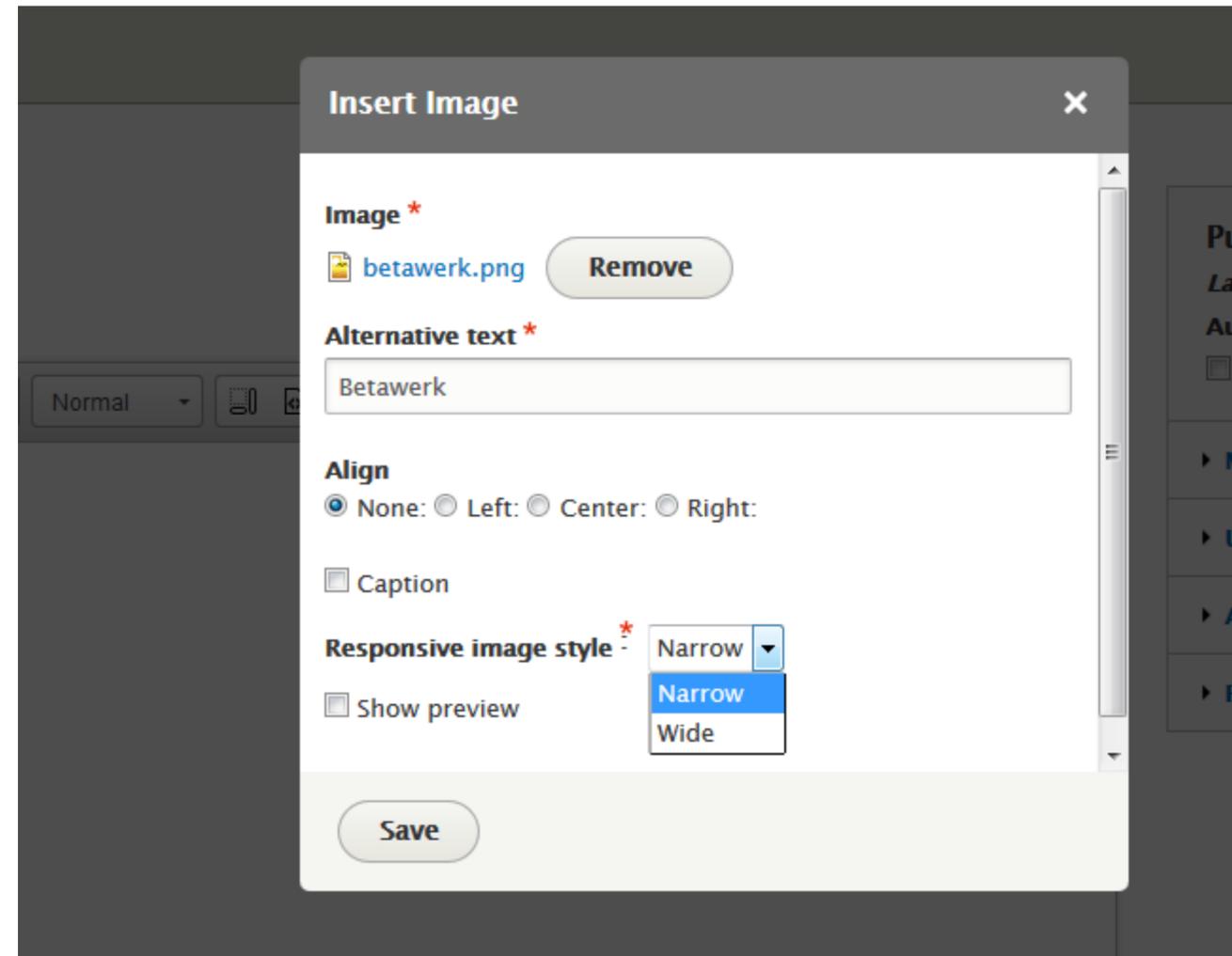
**L O W E F F O R T**

( R E A L L Y )



**W Y S I W Y G**

# R E S P O N S I V E I M A G E S I N S I D E W Y S I W Y G



[https://www.drupal.org/project/inline\\_responsive\\_images](https://www.drupal.org/project/inline_responsive_images)

\*<https://www.drupal.org/node/2061377>

# C O N C L U S I O N S

- Plan your Responsive Images **before** implementing.
- Use Focal Point if you don't need full control.



**THANKS!**

@chumillas



# JOIN US FOR CONTRIBUTION SPRINT

Friday, September 29, 2017

Mentored  
Core Spint

9:00-18:00  
Room: Stolz 2

First time  
Sprinter Workshop

9:00-12:00  
Room: Lehgar 1 - Lehar 2

General sprint

9:00-18:00  
Room: Mall

#drupalsprints





# WHAT DID YOU THINK?

Locate this session at the DrupalCon Vienna website:

<https://events.drupal.org/vienna2017/sessions/responsive-images-and-art-direction-drupal-8>

Take the survey!

<https://www.surveymonkey.com/r/drupalconvienna>





**Q U E S T I O N S**